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PROCESS FOR THE PREPARATION OF ALKANEDIOL

ABSTRACT

10 The invention relates to a process for the
preparation of alkanediol, which process involves (a)
contacting alkylene oxide with carbon dioxide in the
presence of catalyst to obtain a first liquid
reaction mixture containing cyclic carbonate, (b)
optionally removing carbon dioxide and/or alkylene
15 oxide, (c) increasing the pressure of the liquid
reaction mixture obtained in step (a) and/or (b), (d)
contacting the pressurized first reaction mixture
obtained in step (c) with water in the presence of
catalyst to obtain a second reaction mixture
20 containing alkanediol and carbon dioxide, (e)
separating the second reaction mixture into a liquid
effluent and a gaseous effluent containing carbon
dioxide, and (f) recycling at least part of the
gaseous effluent containing carbon dioxide to
25 step (a), in which process the pressure in step (d) is
higher than the pressure in step (a).